

Structure 1b – Welfare Block and Canteen



Photograph 5 – Gable end of the welfare block



Photograph 6 – South-western elevation of structure B1b, welfare block with corrugated metal roof and boarding windows to the right, canteen block with corrugated asbestos roof to the left



Photograph 7 – South-western aspect of structure B1b showing fascia boarding and failed guttering, mortar generally in good condition and fascia boarding fitted close against the wall



Photograph 8 – Subsidence crack in southern-western wall of structure B1b, potentially leads to wall cavity but cobwebs inside



Photograph 9 – Gaps in mortar below fascia boarding, may lead to wall cavity of structure B1b



Photograph 10 – Interior of welfare block of structure B1b, note poor condition of corrugated metal roof



Photograph 11 – Interior of welfare block of structure B1b, showing rendered interior walls that stop well below roof height



Photograph 12 – Interior of welfare block of structure B1b, note good condition of interior brickwork and intact mortar



Photograph 13 – Exterior of canteen of structure B1b, note generally good condition of interior brickwork and intact mortar



Photograph 14 – Canteen end of structure B1b, note crack in mortar on the gable. Fascia boards on lean-to generally tight against brickwork as per the welfare block.



Photograph 15 – Interior of lean-to to canteen, structure B1b



Photograph 16 - South-western aspect of Structure B1c, the Fabrication Building



Photograph 17 - South-western corner of Structure B1c, eroded mortar and cracking but covered by cobwebs



Photograph 18 - Interior of Structure B1c



Photograph 19 – Northern aspect of Structure B2, 'Tube City'



Photograph 20 – Southern aspect of Structure B2



Photograph 21 – Interior of Structure B2



Photograph 22 – Eastern aspect of Structure B3, Pellet Plant Main Building



Photograph 23 – View along northern side of Structure B3, Pellet Plant Main Building



Photograph 23 – View into one of several comparable storage bays that form the ground floor of Structure B3, all accessed from the exterior



Photograph 24 – View of the brickwork and mortar on north side of Structure B3, no damage



Photograph 25 – Interior of first floor of Structure B3



Photograph 26 – Interior of second floor of Structure B3



Photograph 27 – Eastern aspect of Structure B4, Runtech Garage



Photograph 28 – Southern aspect of Structure B4, occupied office buildings



Photograph 29 - Structure B5a



Photograph 30 - Structure B5b



Photograph 31 - Structure B6



Photograph 32 - Structure B7, Steel House

Annex B Results of the Emergence Survey of Structure B1b (Canteen and Welfare Block)

Project Name: Net Zero Teesside – Structure B1b								Surveyor name and location: Surveyor 1 - DC	
Survey Location (6 figure grid ref): NZ 57235 25266								Temperature (°C): 18 Rain¹ (0-5): 0 Wind² (0-7): 1	
Date: 15/09/2020								Cloud Cover³ (0-8): 4	
Sunset/Sunrise time: 19:20								Weather description (incl. previous evening): Warm, calm, no rain.	
Start time: 19:05 Finish time: 20:50									
Equipment used: Batbox Duet, SM2								Bat Calls Verified (name): DBo	

Reference Number	Track No.	Track Time	Real Time	Species ⁴	No. of bats	Emerge (Y/N)	Recording (Y/N)	Activity/Description Activity e.g. Foraging/ Commuting. Description e.g. Flight height, behaviour, direction etc.)
01			19:47	PIPI	1	N	Y	Heard Not Seen (HNS)
02			19:57	PIPI	1	N	Y	HNS
03			20:01	PIPI	1	N	Y	HNS
04			20:06	PI sp.	1	N	Y	HNS
05			20:09	PI sp.	1	N	Y	HNS
06			20:13	PI sp.	1	N	Y	HNS
07			20:50	PIPI	1	N	Y	HNS

¹**Rain scale:** 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood

²**Beaufort wind force scale:** 0 No wind, 1 Light air *smoke drifts*, 2 Light Breeze *leaves rustle*, 3 Gentle Breeze *small twigs move*, 4 Mod Breeze *small branches move*, 5 Fresh Breeze *small trees sway*, 6 Strong Breeze *large branches move*, 7 Mod Gale *whole trees in motion*

³**Percentage scale based on:** 1 = 0-20%, 2 = 21-40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100%

⁴**Abbreviate species based on first two letters of genus and first two of species e.g.** PIPI: common pipistrelle (*Pipistrellus pipistrellus*), PI sp. (either PIPI or PIPY: soprano pipistrelle (*Pipistrellus pygmaeus*))

Project Name: Net Zero Teesside – Structure B1b								Surveyor name and location: Surveyor 2 - CC	
Survey Location (6 figure grid ref): NZ 57276 25234								Temperature (°C): 18 Rain¹ (0-5): 0 Wind² (0-7): 1	
Date: 15/09/2020								Cloud Cover³ (0-8): 4	
Sunset/Sunrise time: 19:20								Weather description (incl. previous evening): Warm, calm, no rain.	
Start time: 19:05 Finish time: 20:50									
Equipment used: Batbox Duet, SM2								Bat Calls Verified (name): DBo	
Reference Number	Track No.	Track Time	Real Time	Species ⁴	No. of bats	Emerge (Y/N)	Recording (Y/N)	Activity/Description Activity e.g. Foraging/ Commuting. Description e.g. Flight height, behaviour, direction etc.)	
01			20:27	PIPI	1	N	Y	HNS	
02			20:30	PIPI	1	N	Y	HNS	
03			20:45	PIPI	1	N	Y	HNS	
¹ Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood ² Beaufort wind force scale: 0 No wind, 1 Light air <i>smoke drifts</i> , 2 Light Breeze <i>leaves rustle</i> , 3 Gentle Breeze <i>small twigs move</i> , 4 Mod Breeze <i>small branches move</i> , 5 Fresh Breeze <i>small trees sway</i> , 6 Strong Breeze <i>large branches move</i> , 7 Mod Gale <i>whole trees in motion</i> ³ Percentage scale based on: 1 = 0-20%, 2 = 21-40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100% ⁴ Abbreviate species based on first two letters of genus and first two of species e.g. PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>)									

Project Name: Net Zero Teesside – Structure B1b							Surveyor name and location: Surveyor 3 - HD	
Survey Location (6 figure grid ref): NZ 57251 25301							Temperature (°C): 18 Rain¹ (0-5): 0 Wind² (0-7): 1	
Date: 15/09/2020							Cloud Cover³ (0-8): 4	
Sunset/Sunrise time: 19:20							Weather description (incl. previous evening): Warm, calm, no rain.	
Start time: 19:05 Finish time: 20:50								
Equipment used: Batbox Duet, SM2							Bat Calls Verified (name): DBo	
Reference Number	Track No.	Track Time	Real Time	Species ⁴	No. of bats	Emerge (Y/N)	Recording (Y/N)	Activity/Description Activity e.g. Foraging/ Commuting. Description e.g. Flight height, behaviour, direction etc.)
01			19:47	PIPI	1	N	Y	HNS
02			19:56	PIPI	1	N	Y	HNS
03			20:00	PIPI	1	N	Y	Flying south to north over building
04			20:14	PIPI	1	N	Y	HNS
05			20:18	PIPI	1	N	Y	Flying south to north over building
06			20:38	PIPI	1	N	Y	HNS, foraging overhead
¹ Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood ² Beaufort wind force scale: 0 No wind, 1 Light air <i>smoke drifts</i> , 2 Light Breeze <i>leaves rustle</i> , 3 Gentle Breeze <i>small twigs move</i> , 4 Mod Breeze <i>small branches move</i> , 5 Fresh Breeze <i>small trees sway</i> , 6 Strong Breeze <i>large branches move</i> , 7 Mod Gale <i>whole trees in motion</i> ³ Percentage scale based on: 1 = 0-20%, 2 = 21--40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100% ⁴ Abbreviate species based on first two letters of genus and first two of species e.g. PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>)								

Annex C Raw Survey Data – 2018 PCC Site Activity Survey

Surveyor	Thomas McQuillan Andrew Westgarth			Date	8/8/18
Start time	21:08	Finish time	22:25	Sunset	20:52
Weather (Level of rainfall, wind and cloud cover)					
Dry, 1- 2 Bft, 20% cloud cover, Humidity 72%					
Temp at start	-	Temp at end	13.2 °C	Weather changes	N/A
Spot count time	3 min			Detector	Pettersson D200 Echo meter Touch 2

BAT PASSES:

Station number	Time (start/end)	Common pipistrelle	Soprano pipistrelle	<i>Myotis</i>	BLE	Noctule	Leisler's	Other	Comments
1	21:08								
2	21:13								
3	21:19								
4	21:25	2 x passes							
5	21:33								
6	21:41								
7	21:48	1 x Pass W to E							
8	21:58								
9	22:03								
10	22:10								
11	22:15								
12	22:22								

Surveyor	Thomas McQuillan Andrew Westgarth			Date	13/9/18
Start time	19:37	Finish time	21:00	Sunset	19:28
Weather (Level of rainfall, wind and cloud cover)					
Dry, 2 Bft, 40% cloud cover, Humidity 67%					
Temp at start	14.7 °C	Temp at end	14 °C	Weather changes	N/A
Spot count time	3 min		Detector	Pettersson D200 Echo meter Touch 2	

BAT PASSES:

Station number	Time (start/end)	Common pipistrelle	Soprano pipistrelle	Myotis	BLE	Noctule	Leisler's	Other	Comments
1	19:37								
2	19:45								
3	19:52								
4	19:58	1 x pass							
5	20:07								
6	20:14								
7	20:21								
8	20:28								
9	20:33								
10	20:40								
11	20:44								
12	20:53								

Annex D Raw Survey Data – 2020

Coatham Sands Activity Survey

Date: 20/05/2020		Temperature (°C): 26		Rain (0-5)²: 0
Sunset time: 21:13		Wind (0-7)³: 2		Cloud Cover (0-5)⁴: 0
Start Time: 20:45	Finish Time: 23:24	Equipment used: Elekon Batlogger M		Weather description (incl. previous evening): Dry, warm, slight breeze, clear. Dry previous evening
Reference Number/Stop	Time	Species¹	No. of bats	Activity/Description
STOP 2	22:13	PIPI	1	Foraging above pond
STOP 3	22:21	NYNO	1	Commuting high above southwest
STOP 6	22:46	PIPI	1	Heard not seen
STOP 6	22:51	PIPI	1	Heard not seen
¹ Species codes: PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>), NYNO: noctule (<i>Nyctalus noctula</i>) ² Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood ³ Beaufort wind force scale: 0 No wind, 1 Light air smoke drifts, 2 Light Breeze leaves rustle, 3 Gentle Breeze small twigs move, 4 Mod Breeze small branches move, 5 Fresh Breeze small trees sway, 6 Strong Breeze large branches move, 7 Mod Gale whole trees in motion ⁴ Percentage scale based on: 1 = 0-20%, 2 = 21--40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100%				

Date: 24/06/2020		Temperature (°C): 21		Rain (0-5)²: 0
Sunset time: 21:45		Wind (0-7)³: 2		Cloud Cover (0-5)⁴: 0
Start Time: 21:45	Finish Time: 00:05	Equipment used: Elekon Batlogger M		Weather description (incl. previous evening): warm and dry evening
Reference Number/Stop	Time	Species¹	No. of bats	Activity/Description
STOP 9	23:01	PIPI	1	Heard not seen
STOP 10	23:11	PIPI	2	Two bats flying overhead
STOP 11	23:25	PIPI	1	At 23:29 bat flying south to north overhead
STOP 12	22:34	PIPI	2	Flying over waterbody
	22:37	PIPI	1	Flying overhead
STOP 1	23:41	PIPI	1	Heard not seen
1	23:46	PIPI	1	Heard not seen
STOP 2	23:47	PIPI	1	Flying over reedbed
STOP 3	23:56	PIPI	1	Heard not seen
2	00:05	PIPI	1	Flying over road

¹ Species codes: PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>)
² Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood
³ Beaufort wind force scale: 0 No wind, 1 Light air smoke drifts, 2 Light Breeze leaves rustle, 3 Gentle Breeze small twigs move, 4 Mod Breeze small branches move, 5 Fresh Breeze small trees sway, 6 Strong Breeze large branches move, 7 Mod Gale whole trees in motion
⁴ Percentage scale based on: 1 = 0-20%, 2 = 21--40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100%

Date: 20/07/2020		Temperature (°C): 14		Rain (0-5)²: 0
Sunset time: 21:30		Wind (0-7)³: 3		Cloud Cover (0-5)⁴: 2
Start Time: 21:28	Finish Time: 05:00	Equipment used: Elekon Batlogger M		Weather description (incl. previous evening): warm and dry evening
Reference Number/Stop	Time	Species¹	No. of bats	Activity/Description
STOP 10	22:38	Unidentified Pipistrelle	1	Heard not seen
STOP 12	22:56	PIPI	1	Flying overhead
	23:00	PIPI	1	Heard not seen
STOP 1	23:05	PIPI	1	Heard not seen
STOP 2	23:10	PIPI	1	Flying overhead
	23:12	PIPI	1	Heard not seen
1	23:17	PIPI	1	Heard not seen
STOP 3	23:17	PIPI	1	Heard not seen
STOP 4	23:25	PIPI	1	Seen at 23:27
2	23:31	PIPI	1	Heard not seen
3	23:35	PIPI	1	Heard not seen
STOP 5	23:37	PIPI	2	Foraging overhead
STOP 6	23:43	PIPI	1	Heard at 23:46
4	02:25	NYNO	1	Heard not seen
5	02:45	<i>Myotis</i> species	1	Heard not seen

¹ Species codes: PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>), NYNO: noctule (<i>Nyctalus noctula</i>)
² Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood
³ Beaufort wind force scale: 0 No wind, 1 Light air smoke drifts, 2 Light Breeze leaves rustle, 3 Gentle Breeze small twigs move, 4 Mod Breeze small branches move, 5 Fresh Breeze small trees sway, 6 Strong Breeze large branches move, 7 Mod Gale whole trees in motion
⁴ Percentage scale based on: 1 = 0-20%, 2 = 21--40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100%

Date: 17/08/2020		Temperature (°C): 20		Rain (0-5)²: 0
Sunset time: 20:29		Wind (0-7)³: 2		Cloud Cover (0-5)⁴: 2
Start Time: 20:20	Finish Time: 22:43	Equipment used: Elekon Batlogger M		Weather description (incl. previous evening): warm and dry evening
Reference Number/Stop	Time	Species ¹	No. of bats	Activity/Description
STOP 3	22:08	PIPI	1	Heard not seen
STOP 4	22:16	PIPI	1	Heard not seen
		PIPI	1	Heard not seen
		PIPI	1	Heard not seen
1	22:21	PIPI	1	Heard not seen
2	22:23	PIPI	1	Heard not seen
¹ Species codes: PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>) ² Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood ³ Beaufort wind force scale: 0 No wind, 1 Light air smoke drifts, 2 Light Breeze leaves rustle, 3 Gentle Breeze small twigs move, 4 Mod Breeze small branches move, 5 Fresh Breeze small trees sway, 6 Strong Breeze large branches move, 7 Mod Gale whole trees in motion ⁴ Percentage scale based on: 1 = 0-20%, 2 = 21--40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100%				

Date: 14/09/2020		Temperature (°C): 18		Rain (0-5)²: 0
Sunset time: 19:23		Wind (0-7)³: 2		Cloud Cover (0-5)⁴: 1
Start Time: 19:23	Finish Time: 21:23	Equipment used: Elekon Batlogger M		Weather description (incl. previous evening): warm and dry evening, dry previous evening
Reference Number/Stop	Time	Species ¹	No. of bats	Activity/Description
3	20:42	PIPI	1	Foraging over reeds
¹ Species codes: PIPI: common pipistrelle (<i>Pipistrellus pipistrellus</i>) ² Rain scale: 0 = none, 1 = drizzle, 2 = shower, 3 = rain, 4 = downpour, 5 = flood ³ Beaufort wind force scale: 0 No wind, 1 Light air smoke drifts, 2 Light Breeze leaves rustle, 3 Gentle Breeze small twigs move, 4 Mod Breeze small branches move, 5 Fresh Breeze small trees sway, 6 Strong Breeze large branches move, 7 Mod Gale whole trees in motion ⁴ Percentage scale based on: 1 = 0-20%, 2 = 21--40%, 3 = 41-60%, 4 = 61-80%, 5 = 81-100%				

Annex E Results of the 2020 Static Detector Survey at Coatham Sands

Static Detector 1

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of bats			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	20/05/2020	21:12	04:49	7.7	29	22	0	7	3.8	
2	21/05/2020	21:14	04:48	7.6	222	203	0	19	29.2	
3	22/05/2020	21:16	04:46	7.6	16	15	1	0	2.1	
4	23/05/2020	21:17	04:45	7.5	0	0	0	0	0.0	
5	24/05/2020	21:19	04:44	7.5	73	72	0	1	9.7	
					Total	312	1	27	Mean Activity Index	9.0

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	20/07/2020	21:24	04:55	7.5	96	96	0	0	12.8	
2	21/07/2020	21:23	04:57	7.5	104	103	0	1	13.9	
3	22/07/2020	21:21	04:58	7.6	105	102	1	2	13.8	
4	23/07/2020	21:20	05:00	7.6	48	48	0	0	6.3	
5	24/07/2020	21:18	05:02	7.7	91	91	0	0	11.8	
					Total	440	1	3	Mean Activity Index	11.7

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of bats			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	17/08/2020	20:30	05:44	9.2	75	71	0	4	8.2	
2	17/08/2020	20:28	05:46	9.3	107	106	0	1	11.5	
3	17/08/2020	20:26	05:48	9.3	35	35	0	0	3.8	
4	17/08/2020	20:23	05:49	9.4	22	22	0	0	2.3	
5	17/08/2020	20:21	05:51	9.4	3	2	0	1	0.3	
					Total	236	0	6	Mean Activity Index	5.2

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of bats			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	14/09/2020	19:22	06:35	11.2	45	45	0	0	4.0	
2	15/09/2020	19:19	06:37	11.2	51	48	2	1	4.6	
3	16/09/2020	19:17	06:39	11.3	3	3	0	0	0.3	
4	17/09/2020	19:14	06:41	11.3	5	5	0	0	0.4	
5	18/09/2020	19:12	06:43	11.4	2	2		0	0.2	
					Total	103	0	1	Mean Activity Index	1.9

Static Detector 2

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	22/06/2020	21:44	04:27	6.7	21	19	1	1	3.1	
2	23/06/2020	21:44	04:28	6.7	81	81	0	0	12.1	
3	24/06/2020	22:44	04:28	6.7	41	40	1	0	6.1	
4	25/06/2020	23:44	04:29	6.7	19	18	1	0	2.8	
5	26/06/2020	00:44	04:29	6.7	20	19	1	0	3.0	
					Total	177	4	1	Mean Activity Index	5.4

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	20/07/2020	21:24	04:55	7.5	13	11	1	1	1.7	
2	21/07/2020	21:23	04:57	7.5	34	34	0	0	4.5	
3	22/07/2020	21:21	04:58	7.6	48	46	0	2	6.3	
4	23/07/2020	21:20	05:00	7.6	26	26	0	0	3.4	
5	24/07/2020	21:18	05:02	7.7	74	74		0	9.6	
					Total	191	1	3	Mean Activity Index	5.1

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of bats			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	17/08/2020	20:30	05:44	9.2	10	10	0	0	1.1	
2	17/08/2020	20:28	05:46	9.3	9	9	0	0	1.0	
3	17/08/2020	20:26	05:48	9.3	7	7	0	0	0.8	
4	17/08/2020	20:23	05:49	9.4	7	7	0	0	0.7	
5	17/08/2020	20:21	05:51	9.4	1	1	0	0	0.1	
					Total	34	0	0	Mean Activity Index	0.7

Night	Date	Sunset	Sunrise	Average hours of darkness	Total no. bats	Species and number of bats			Bat Activity Index	
						Common pipistrelle	<i>Myotis sp.</i>	Noctule		
1	14/09/2020	19:22	06:35	11.2	7	5	0	2	0.6	
2	15/09/2020	19:19	06:37	11.2	40	26	0	14	3.6	
3	16/09/2020	19:17	06:39	11.3	3	2	1	0	0.3	
4	17/09/2020	19:14	06:41	11.3	1	1	0	0	0.1	
5	18/09/2020	19:12	06:43	11.4	0	0	0	0	0	
					Total	34	1	16	Mean Activity Index	0.9